

METHOD AND APPARATUS FOR PREPARING A DIALKYL CARBONATE,
AND ITS USE IN THE PREPARATION OF DIARYL CARBONATES AND
POLYCARBONATES

ABSTRACT OF THE DISCLOSURE

[0066] Unexpected corrosion of downstream sections of a dialkyl carbonate manufacturing apparatus has been traced to alkyl chloroformate impurities, which slowly decompose to yield hydrochloric acid. An improved process and apparatus for dialkyl carbonate synthesis reduce corrosion by physically removing or chemically decomposing the alkyl chloroformate impurities within the corrosion-resistant upstream sections of the apparatus. The alkyl chloroformate may be decomposed by passing it through a passageway at a temperature of about 30°C to about 130°C for a time of about 0.5 hour to about 10 hours. The passageway may include one or more holding vessels or a tubular section that promotes plug flow.